

The revisions to Table 1 are shown in the appendix at the back.

In the Claims:

Please amend the claims by canceling, without prejudice, claims 1, 2, 4 and 5, 10, and 45-59, and amend claims 11-13 and 28-44 as follows:

14/E 5. (Amended) A recombinant adenovirus that comprises SEQ ID NO:1 or SEQ ID NO:2.

11. (Amended) The method of claim 13 wherein the adenovirus death protein comprises SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, [or] SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11 or SEQ ID NO:12.

12. (Amended) The method of claim 13, wherein the adenovirus vector comprises a recombinant adenovirus lacking expression of at least one E3 protein selected from the group consisting of: gp19K; RID α ; RID β and 14.7K.

13. (Amended) A method for promoting death of a neoplastic cell comprising contacting the neoplastic cell with an adenovirus vector, wherein the neoplastic cell is contained in a tumor in a patient and the contacting step comprises administering the adenovirus vector to neoplastic cells of the tumor, and further wherein:

(a) at least one adenoviral vector is introduced into the neoplastic cell, and

(b) said adenovirus vector is replication-competent in neoplastic cells and overexpresses an adenovirus death protein, wherein overexpression is defined as overexpression relative to a control adenovirus vector that has the E3 structure of d1309 but otherwise has the same genetic structure as the overexpressing vector.

28. (Amended) The method of claim 13, wherein the adenovirus vector is replication defective, or it is replication-restricted to dividing cells or neoplastic cells.

29. (Amended) The method of claim 28, wherein the adenovirus vector comprises a mutation in an E1A gene that renders the adenovirus incapable of expressing an E1A viral protein which binds the pRB and the p300/CBP proteins.

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30. (Amended) The method of claim 28, wherein an E4 promoter of said recombinant adenovirus vector is substituted with a promoter, which is activated in neoplastic cells.

31. (Amended) The method of claim 30, wherein the promoter, which is activated in neoplastic cells, is the surfactant protein B ("SPB") promoter.

32. (Amended) The method of claim 28, wherein the overexpression relative to a control virus is detectable by western blot, cell lysis or by a cell spreading assay.

33. (Amended) The method of claim 13, wherein the recombinant adenovirus lacks expression of at least one E3 protein selected from the group consisting of gp19K, RID α , RID β and 14.7K.

34. (Amended) The method of claim 33, wherein the recombinant adenovirus lacks expression of the gp19K protein.

35. (Amended) The method of claim 33, wherein the recombinant adenovirus lacks expression of the RID α protein.

36. (Amended) The method of claim claim 33, wherein the recombinant adenovirus lacks expression of the RID β protein.

37. (Amended) The method of claim 33, wherein the recombinant adenovirus lacks expression of the 14.7K protein.

38. (Amended) The method of claim 33, wherein the recombinant adenovirus lacks expression of the gp19K, RID α , RID β and 14.7K proteins.

39. (Amended) The method of claim 28, wherein the recombinant adenovirus comprises a deletion in the E3 region that removes a splice site for any of the E3 mRNAs.

40. (Amended) The method of claim 13, wherein the recombinant adenovirus comprises at least one deletion in the E3 region, wherein the at least one deletion comprises a sequence that encodes at least one E3 protein, wherein the protein is selected from the group consisting of gp19K, RID α , RID β , and 14.7K.

41. (Amended) The method of claim 40, wherein the at least one deletion comprises a sequence that encodes the gp19K, RID α , RID β and 14.7K proteins.

42. (Amended) The method of claim 41, wherein the at least one deletion further comprises a sequence that encodes the 6.7K protein.

43. (Amended) The method of claim 41, wherein the at least one deletion further comprises a sequence that encodes the 12.5K protein.

44. (Amended) The method of claim 41, wherein the at least one deletion further comprises a sequence that encodes the 6.7K and 12.5K proteins.

Please add the following claims, claims 60 – 100:

60. A method for promoting death of a neoplastic cell contained in a tumor in a patient, the method comprising administering to the tumor an adenovirus vector that is replication-competent in neoplastic cells and expresses ADP, wherein:

- a) the ADP is expressed from an ADP coding sequence positioned under the control of a promoter other than the endogenous promoters for ADP;
- b) the adenovirus vector comprises a deletion in the E3 region that removes a splice site for an E3 mRNA;

- c) the ADP is expressed from an ADP coding sequence flanked by a pre-mRNA splicing and cleavage/polyadenylation signal other than the pre-mRNA splicing and cleavage/polyadenylation signal normally associated with the ADP gene, and/or
- d) the ADP is expressed from an ADP coding sequence that is positioned downstream of the coding sequence for another adenovirus mRNA, together with a sequence on the 5' side of the ADP coding sequence that allows for internal initiation of translation of ADP.

61. The method of claim 60 wherein the ADP comprises the sequence of SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11 or SEQ ID NO:12.

62. The method of claim 60, further comprising the step of passively immunizing the patient against the recombinant adenovirus.

63. The method of claim 62, wherein the recombinant adenovirus comprises SEQ ID NO:1 or SEQ ID NO:2.

64. The method of claim 60, further comprising treating the tumor with radiation.

65. The method of claim 64 comprising administering more than one distinct type of recombinant adenovirus to the tumor and treating the tumor with radiation, wherein at least one recombinant adenovirus is replication-defective.

66. The method of claim 60, further comprising treating the tumor with chemotherapy.

67. The method of claim 60, further comprising administering to the tumor one or more replication-defective adenoviruses, wherein each replication-defective adenovirus

expresses an anti-cancer gene product, and wherein the recombinant-competent adenovirus facilitates the spread of adenoviruses in the tumor.

68. The method of claim 60, wherein the ADP is expressed from an ADP coding sequence positioned under the control of a promoter other than the endogenous promoters for ADP.

69. The method of claim 68, wherein the ADP coding sequence is positioned under the control of a promoter that is exogenous to adenovirus.

70. The method of claim 60, wherein the ADP coding sequence is positioned behind a coding sequence for another adenovirus mRNA together with a sequence on the 5' side of the ADP coding sequence that allows for internal initiation of translation of ADP.

71. The method of claim 70, wherein the sequence on the 5' side of the ADP coding sequence that allows for internal initiation of translation of ADP is an Ad tripartite leader or a viral internal ribosome initiation sequence.

72. The method of claim 60, wherein the adenovirus vector comprises a deletion in the E3 region that removes a splice site for an E3 mRNA.

73. The method of claim 72, wherein the adenovirus vector lacks expression of at least one E3 protein selected from the group consisting of gp19K, RID α , RID β , and 14.7K.

74. The method of claim 73, wherein the adenovirus vector lacks expression of each of gp19K, RID α , RID β , and 14.7K.

75. The method of claim 74, wherein the adenovirus additionally lacks expression of the E3 6.7K and 12.5K proteins.

76. The method of claim 60, wherein the adenovirus vector is replication-defective.

77. The method of claim 76, wherein the adenovirus vector is replication-restricted to neoplastic cells.

78. The method of claim 60, wherein the adenovirus vector comprises a mutation in its E1 region.

79. The method of claim 78, wherein the adenovirus vector comprises a 1101/1107 mutation in its E1A coding region.

80. The method of claim 60, wherein the adenovirus vector comprises an adenoviral gene essential for replication positioned under the control of a tissue specific or tumor specific promoter.

81. The method of claim 80, wherein the adenovirus vector comprises an E4 gene positioned under the control of a tissue specific promoter.

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82. The method of claim 80, wherein the promoter is a transcriptional regulatory element, a prostate specific antigen promoter, a human alpha-lactalbumin promoter, a mamoglobin promoter, a surfactant protein B promoter, a factor VII promoter, or a survivin promoter.

83. The method of claim 60, wherein the adenovirus vector comprises an adenoviral gene essential for replication under the control of an inducible promoter.

84. The method of claim 83, wherein the inducible promoter is a metallothionein promoter, a glucocorticoid promoter, a tetracycline response promoter or a heat shock promoter.

85. The method of claim 60, wherein the adenovirus vector further comprises a coding region for an anticancer gene product.

86. The method of claim 85, wherein the anticancer gene product is an apoptosis-promoting agent.

87. The method of claim 86, wherein the apoptosis-promoting agent is a pro-apoptotic member of the BCL-2 family.

88. The method of claim 86, wherein the anticancer gene product is an antisense molecule that blocks expression of an anti-apoptotic member of the BCL-2 family.

89. The method of claim 85, wherein the anticancer gene product is an immunoregulatory molecule.

90. The method of claim 89, wherein the immunoregulatory molecule is a cytokine.

91. The method of claim 90, wherein the cytokine is tumor necrosis factor, Fas/Apo1/CD95 ligand, tumor necrosis factor related apoptosis inducing ligand, an interleukin, macrophage activating factor or interferon γ .

92. The method of claim 85, wherein the anticancer gene product is an angiogenesis inhibitor.

93. The method of claim 92, wherein the angiogenesis inhibitor is endostatin or angiostatin.

94. The method of claim 85, wherein the anticancer gene product is a toxin.

95. The method of claim 94, wherein the toxin is ricin or lymphotoxin.

96. The method of claim 85, wherein the anticancer gene product is a prodrug converting enzyme.